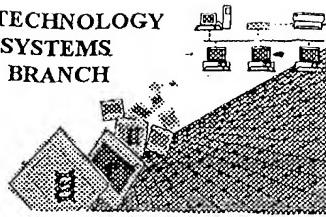


BIOTECHNOLOGY
SYSTEMS
BRANCH



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/669,768
Source: OPIE
Date Processed by STIC: 10/8/2003

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkr41note.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>), EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to (EFFECTIVE 12/01/2003):
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 10/08/2003



IFWO

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/669,768

DATE: 10/08/2003
TIME: 13:21:28

Input Set : A:\ONYX1047-PCT.ST25.txt
Output Set: N:\CRF4\10082003\J669768.raw

3 <110> APPLICANT: ONYX PHARMACEUTICALS, INC.
5 <120> TITLE OF INVENTION: ADENOVIRUS E1B-55K SINGLE AMINO ACID MUTANT AND METHODS OF
USE
7 <130> FILE REFERENCE: ONYX1047-PCT
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/669,768
C--> 11 <141> CURRENT FILING DATE: 2003-09-24
13 <150> PRIOR APPLICATION NUMBER: US 60/222,887
15 <151> PRIOR FILING DATE: 2000-08-03
17 <160> NUMBER OF SEQ ID NOS: 52
19 <170> SOFTWARE: PatentIn version 3.1

ERRORED SEQUENCES

77 <210> SEQ ID NO: 5
79 <211> LENGTH: 29
81 <212> TYPE: DNA
83 <213> ORGANISM: ARTIFICIAL
W--> 85 <220> FEATURE: ONYX-053 Virus
W--> 87 <223> OTHER INFORMATION:
E--> 87 <400> SEQUENCE: 5
88 ccaacaccttat cctagccggtaaagcttc

(global error)
Never insert a response to <2207. Does Not Comply
with <2137 response of "Artificial Sequence" or "Unknown"
on the <2237 line. <2207 is a "header" only.
see pp 1-3
Explain a Corrected Dicollecte Needed
see p. 2 for this error explanation

See p. 3 and consult
1. 823 of Sequence Rules

10/669,268

2

<210> 5

<211> 29

<212> DNA

<213> ARTIFICIAL

<220> ONYX-053 Virus

<223>

Move to <223> line

<400> 5

ccaacacctat cctagccggtaaagcttc

29

insert
opening
bracket.

It is missing.

3

RAW SEQUENCE LISTING ERROR SUMMARY. DATE: 10/08/2003
PATENT APPLICATION: US/10/669,768 TIME: 13:21:29

Input Set : A:\ONYX1047-PCT.ST25.txt
Output Set: N:\CRF4\10082003\J669768.raw

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27
Seq#:28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51
Seq#:52

Use of <220> Feature (NEW RULES):

Sequence(s) are missing the <220> Feature and associated headings.
Use of <220> to <223> is MANDATORY if <213> ORGANISM is "Artificial Sequence"
or "Unknown". Please explain source of genetic material in <220> to <223>
section (See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32)
(Sec. 1.823 of new Rules)

Seq#:1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27
Seq#:28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51
Seq#:52

Insert a <223> line and move response
from <220> to <223> line

VERIFICATION SUMMARY DATE: 10/08/2003
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Input Set : A:\ONYX1047-PCT.ST25.txt
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L:9 M:270 C: Current Application Number differs, Replaced Current Application Number
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:29 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:31 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:1, <213>
ORGANISM:Artificial
L:31 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:1,Line#:31
L:43 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:45 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:2, <213>
ORGANISM:ARTIFICIAL
L:45 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:2,Line#:45
L:57 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:59 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:3, <213>
ORGANISM:ARTIFICIAL
L:59 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:3,Line#:59
L:71 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:73 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:4, <213>
ORGANISM:ARTIFICIAL
L:73 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:4,Line#:73
L:85 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:87 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:4, <213>
ORGANISM:ARTIFICIAL
L:87 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:5 differs:4
L:87 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:5,Line#:87
L:99 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:101 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:6, <213>
ORGANISM:ARTIFICIAL
L:101 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:6,Line#:101
L:113 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:115 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:7, <213>
ORGANISM:ARTIFICIAL
L:115 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:7,Line#:115
L:127 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:129 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:8, <213>
ORGANISM:ARTIFICIAL
L:129 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:8,Line#:129
L:141 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:143 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:9, <213>
ORGANISM:ARTIFICIAL
L:143 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:9,Line#:143
L:155 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:157 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:10, <213>
ORGANISM:ARTIFICIAL
L:157 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:10,Line#:157
L:169 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:171 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:11, <213>
ORGANISM:ARTIFICIAL
L:171 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:11,Line#:171
L:183 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:185 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:12, <213>
ORGANISM:ARTIFICIAL
L:185 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:12,Line#:185
L:197 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:199 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:13, <213>

ORGANISM:ARTIFICIAL

L:199 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:13,Line#:199

L:211 M:256 W: Invalid Numeric Header Field, <220> has non-blank data

L:213 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:14, <213>

ORGANISM:ARTIFICIAL

L:213 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:14,Line#:213

L:225 M:256 W: Invalid Numeric Header Field, <220> has non-blank data

L:227 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:15, <213>

ORGANISM:ARTIFICIAL

L:227 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:15,Line#:227

VERIFICATION SUMMARY
PATENT APPLICATION: US/10/669,768

DATE: 10/08/2003
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Input Set : A:\ONYX1047-PCT.ST25.txt
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L:239 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:241 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:16, <213>
ORGANISM:ARTIFICIAL
L:241 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:16,Line#:241
L:253 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:255 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:17, <213>
ORGANISM:ARTIFICIAL
L:255 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:17,Line#:255
L:267 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:269 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:18, <213>
ORGANISM:ARTIFICIAL
L:269 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:18,Line#:269
L:281 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:283 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:19, <213>
ORGANISM:ARTIFICIAL
L:283 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:19,Line#:283
L:295 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:297 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:20, <213>
ORGANISM:ARTIFICIAL
L:297 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:20,Line#:297
L:309 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:311 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:21, <213>
ORGANISM:ARTIFICIAL
L:311 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:21,Line#:311
L:323 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:325 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:22, <213>
ORGANISM:ARTIFICIAL
L:325 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:22,Line#:325
L:337 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:339 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:23, <213>
ORGANISM:ARTIFICIAL
L:339 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:23,Line#:339
L:351 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:353 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:24, <213>
ORGANISM:ARTIFICIAL
L:353 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:24,Line#:353
L:365 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:367 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:25, <213>
ORGANISM:ARTIFICIAL
L:367 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:25,Line#:367
L:379 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:393 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:407 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:421 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:435 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:449 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:463 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:477 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:491 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:505 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:519 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:533 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:547 M:256 W: Invalid Numeric Header Field, <220> has non-blank data

L:561 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:575 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:589 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:603 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:617 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:631 M:256 W: Invalid Numeric Header Field, <220> has non-blank data

VERIFICATION SUMMARY

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Input Set : A:\ONYX1047-PCT.ST25.txt
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L:645 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:659 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:673 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:687 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:701 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:715 M:256 W: Invalid Numeric Header Field, <220> has non-blank data